

# PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)


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| Applicant's or agent's file reference<br>TS 8580 PCT  |  | <b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA416) |  |
| International application No.<br>PCT/EP 03/07860  | International filing date (day/month/year)<br>18.07.2003 | Priority date (day/month/year)<br>19.07.2002  |  |
| International Patent Classification (IPC) or both national classification and IPC<br>C10L1/04 |  |   |  |
| Applicant<br>SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ B.V.                                  |  |   |  |

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 5 sheets, including this cover sheet.
  - ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of    sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

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| Date of submission of the demand<br><br>18.02.2004  | Date of completion of this report<br><br>16.11.2004                                 |
| Name and mailing address of the International preliminary examining authority:<br><br> European Patent Office - P.B. 5818 Patentlaan 2<br>NL-2280 HV Rijswijk - Pays Bas<br>Tel. +31 70 340 - 2040 Tx: 31 651 epo nl<br>Fax: +31 70 340 - 3016 | Authorized Officer<br><br>Bertin-van Bommel, S<br><br>Telephone No. +31 70 340-4231 |



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/EP 03/07860**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-9 as originally filed

**Claims, Numbers**

1-13 as originally filed

**Drawings, Sheets**

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

|                               |             |      |
|-------------------------------|-------------|------|
| Novelty (N)                   | Yes: Claims | 1-13 |
|                               | No: Claims  |      |
| Inventive step (IS)           | Yes: Claims |      |
|                               | No: Claims  | 1-13 |
| Industrial applicability (IA) | Yes: Claims | 1-13 |
|                               | No: Claims  |      |

2. Citations and explanations

**see separate sheet**

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**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

The following documents are referred to in this communication:

D1: US-A-3 545 902 (BAILEY FRANK W) 8 December 1970 (1970-12-08)

D2: US-A-5 807 413 (BERLOWITZ PAUL JOSEPH ET AL) 15 September 1998 (1998-09-15)

1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.

Document D1 (abstract), which is considered to represent the most relevant state of the art, discloses the use of a fuel oil, kerosene or gasoline in a multi-fuel blue flame burner.

The difference with claim 1 is that a Fischer-Tropsch derived fuel is not included in the possible fuels.

The problem to be solved by the present invention may be regarded as reducing carbon deposits and emissions of unburned hydrocarbons and carbon monoxide, as well as any significant odour, during the use of the fuel in the blue flame burner.

The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step because it is generally known to the person skilled in the field of fuels, that a Fischer-Tropsch derived fuel is an equivalent to the mineral-oil derived fuels of document D1, and can be interchanged with these fuels, in the **multi-fuel** burner, without the exercise of inventive skill.

Moreover, it is known to the skilled person that a Fischer-Tropsch derived fuel also causes less carbon deposits, no significant odour and reduced carbon monoxide and unburned hydrocarbon emissions (D2: col.5, ln.14-25, concerning F-T fuel (C); Table 5). The skilled person would therefore regard it as a normal option to use a Fischer-Tropsch derived fuel as the synthetic fuel in the process of D1, thereby arriving at a process according to claim 1.

2. Dependent claims 2-13 do not appear to contain any additional features which, in

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combination with the features of any claim to which they refer, meet the requirements of the PCT with respect to inventive step, the reasons being as follows:

- i. The additional features of claims 4 and 5 are disclosed in document D1 (abstract).
- ii. The additional features of claims 2,3,6-13 come within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance. Consequently, the subject-matter of claims 2-5 and 10-16 also appears to lack an inventive step.